

HB-12000-SBS

25GigE-SFP28 camera with Sony IMX949



Product Description

The BOLT 25GigE HB-12000-SBS features the back-illuminated Sony IMX949 CMOS sensor. At full resolution (12.6 MP, 4096 × 3072), it achieves up to 240 frames per second.

The larger 5.48 µm pixel size is designed for applications requiring higher sensitivity. Collecting more light improves performance in low-light or high-speed conditions.

In industrial inspection, users experience faster imaging with reduced motion blur, providing more reliable quality inspection capabilities.

Its 25GigE SFP28 interface offers many benefits including low-cost accessories, low CPU overhead, low latency, low jitter, and accurate multi-camera synchronization using IEEE1588. Emergent supports standard SFP28 cabling options, including lengths from 1 meter to 10 kilometers.

If you like the Sony IMX949 sensor, but require higher framerates, look at the [ZENITH 100GigE HZ-12000-SBS](#).

Key Benefits

- » High-speed 25GigE SFP28
- » RoCEv2, RDMA, GigE Vision® 3.0 firmware available. GenICam™ compliant.
- » Back-illuminated pixel structure
- » 25x the speed of GigE
- » Available in monochrome (HB-12000-SBS-M), and color (HB-12000-SBS-C)
- » Optional IP67 housing

Applications

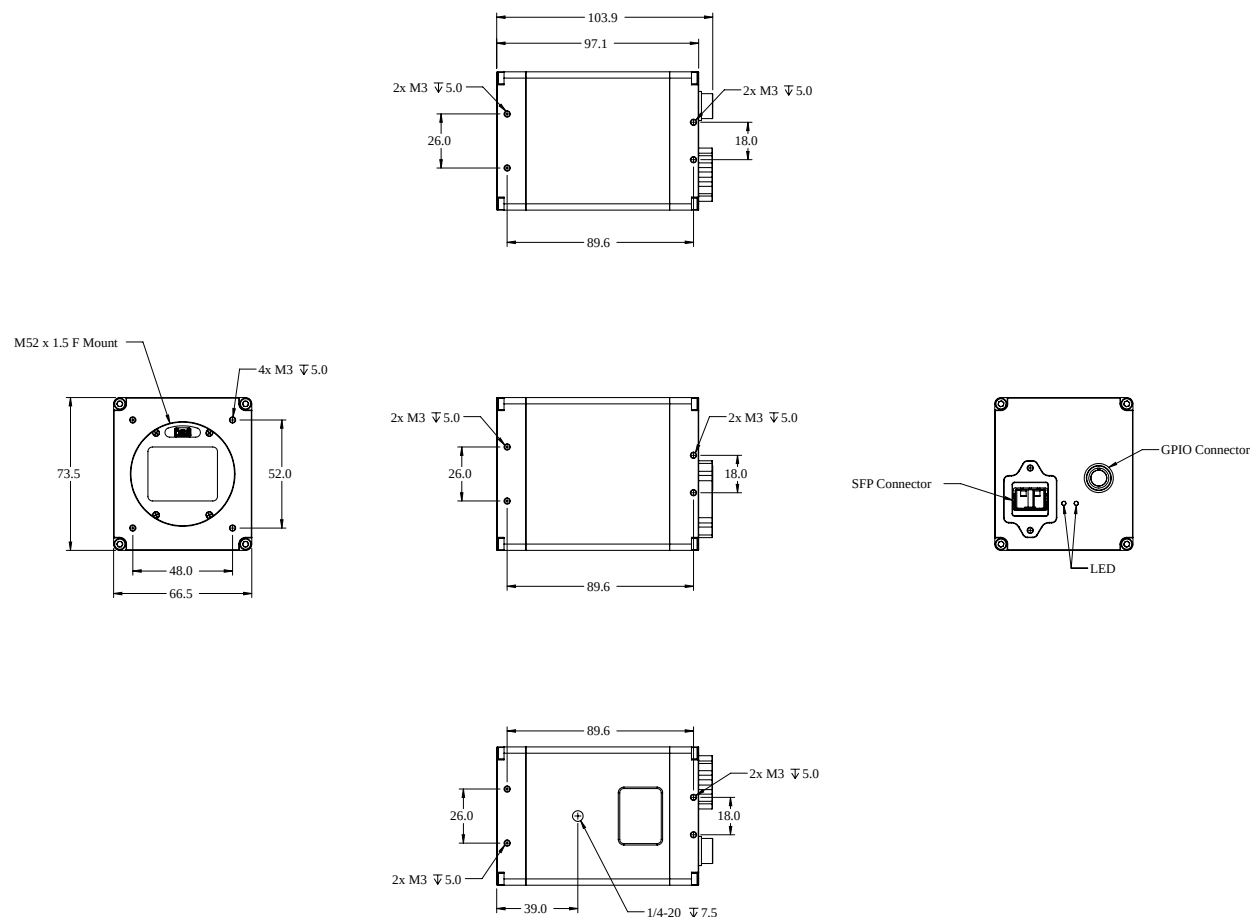
- » Industrial Inspection
- » Automation
- » Intelligent Transportation Systems
- » Logistics
- » Virtual Reality

** All minimum exposure specs can vary from what is listed based on the limitations of each sensor as per notice from the manufacturer.*

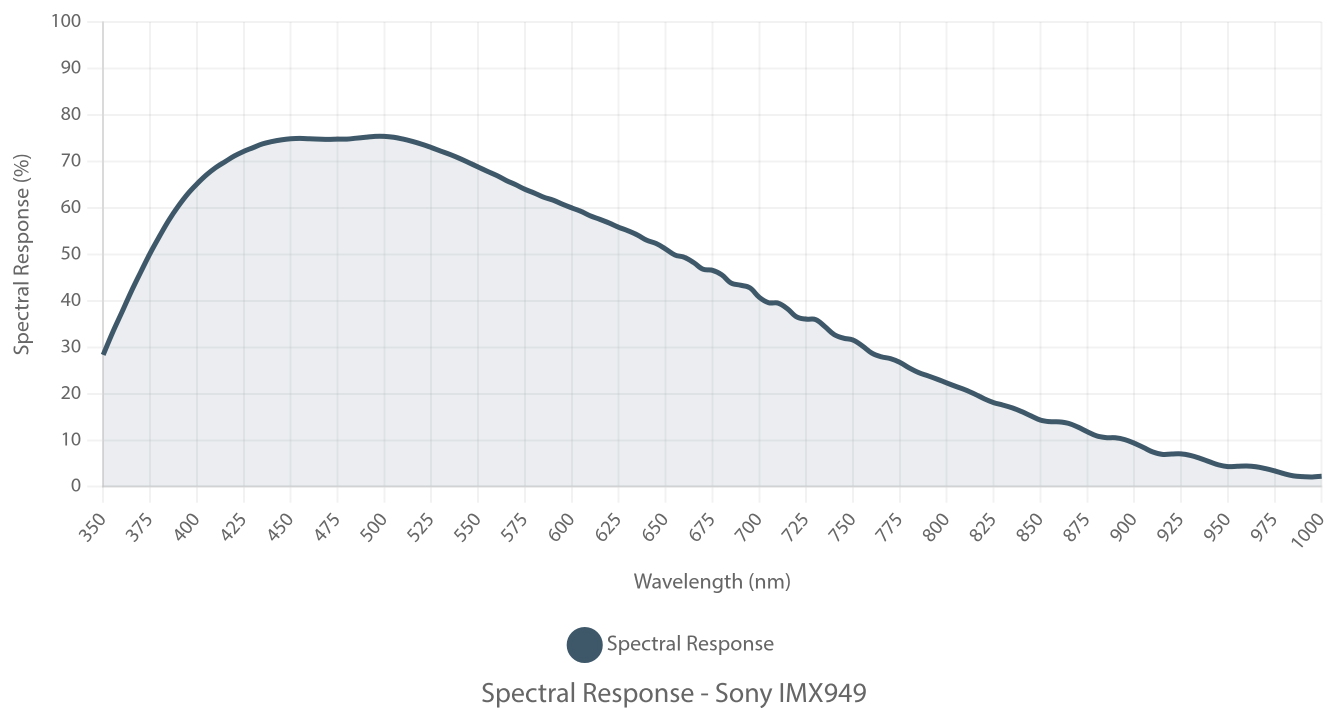
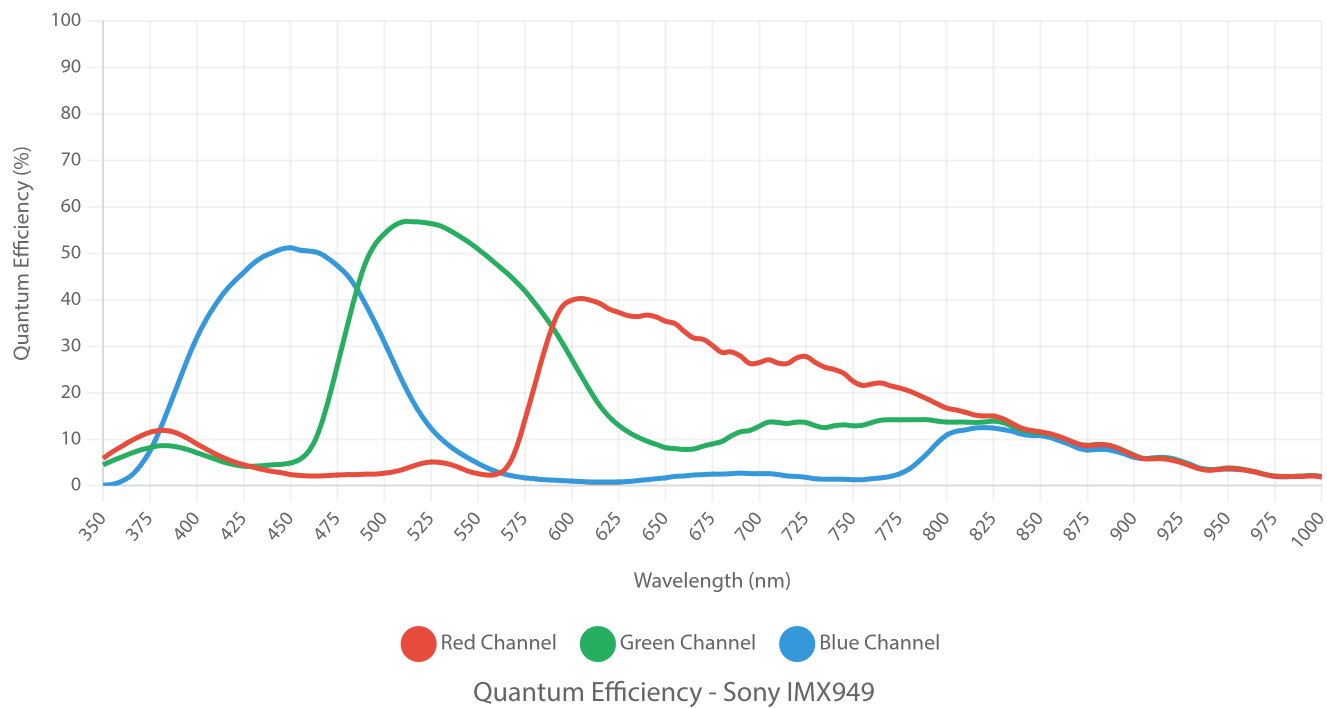
Specifications

Sensor	Sony IMX949
Resolution	4096 x 3072
Megapixels	12.6MP
Sensor Type	CMOS (1.8)
Max Frame Rate	240fps (8-bit) 160fps (10-bit) 160fps (12-bit)
Cell Size	5.48 x 5.48µm
Standard Mount	M52 Mount, RF Mount, EF/F Mount
Shutter	Global
Bit Depth	8, 10, 12-bit
GPIO / Triggering	3 in, 3 out, Software, External (Pulse or Edge)
Interface	25GigE-SFP28
Exposure/Integration *	1µs - 1s
Dynamic Range	60 dB
Monochrome Modes	Mono8, Mono10, Mono10Packed, Mono12, Mono12Packed
Raw Modes	BayerRG8, BayerRG10, BayerRG10Packed, BayerRG12, BayerRG12Packed
Operating System	Windows (64-bit), Linux (64-bit)
Vision Standards	GigE Vision 3.0, RDMA, RoCEv2, GenICam
Regulatory	CE, FCC, RoHS, WEEE
Power Requirements	12W (12V)
Operating Temperature	-20°C to 50°C
Storage Temperature	-30°C to 60°C
Dimensions & Weight	97 x 66 x 73mm – 750g
Warranty	3 Years

Mechanical Drawing



Technical Details



Contact Us

Any Questions? Get in touch with us today and our team of imaging professionals will be pleased to assist you.

Phone: 1-866-780-6082

Email: sales@emergentvisiontec.com